UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,508	10/31/2003	Robert H. Wollenberg	T-6298C (538-62)	3589

7590 11/04/2005

Michael E. Carmen, Esq.
M. CARMEN & ASSOCIATES, PLLC
Suite 400
170 Old Country Road
Mineola, NY 11501

EXAMINER	
WALLENHORST, MAUREEN	
ART UNIT	**PAPER NUMBER**
1743	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/699,508	WOLLENBERG ET AL.	
	Examiner	Art Unit	
	Maureen M. Wallenhorst	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/19/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The disclosure is objected to because of the following informalities: On page 19, line 20 of the specification, the phrase "US Patent Application serial no. 10/699,510 filed on October 31, 2005" should be changed to –US Patent Application serial no. 10/699,510 filed on October 31, 2003—since this application was filed in the year 2003, not 2005.

Appropriate correction is required.

2. It is noted that claim 9 is missing from the listing of claims in the response received on August 30, 2005. It will be assumed that claim 9 remains pending and in its original form for purposes of examination in this Office action.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-3, 6, 11-12, 15-18 and 21-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 17-18 and 24-30 of copending Application No. 10/779,422. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method and system for screening lubricating oil composition samples under program control by providing a plurality of different lubricating oil composition samples, each sample containing a major amount of a base oil and a minor amount of a lubricating oil additive, measuring a stability characteristic of the samples and outputting the results. Since the claims of the instant application recite that the oxidation stability of the samples can be measured by determining the amount of deposits that form in each sample on a transparent substrate after a predetermined time, this is equivalent to the measurement of deposit formation recited in the claims of application serial no. 10/779,422.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-3 and 10-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20, 22-24 and 26-30 of copending Application No. 10/699,529. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing and screening lubricating oil additive compositions comprising the steps of providing a plurality of lubricating oil additive compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, measuring composition property data such as the oxidation stability of the samples, and outputting the results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1, 3, 10-18 and 22-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 13-17, 20, 22, 34-37, 39-42 and 44-45 of copending Application No. 10/699,507. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method and system for screening lubricating oil composition samples under program control by providing a plurality of different lubricating oil composition samples, each sample containing a major amount of a base oil and a minor amount of a lubricating oil additive, measuring stability properties of the samples and outputting the results. It would have been obvious to one of ordinary skill in the art to either measure the storage stability or the oxidation stability of the composition samples in the screening method since both equivalently can indicate the usefulness and performance characteristics of the samples for their intended use as lubricants.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1, 3, 15, 17 and 22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 13, 19-22 and 33-35 of copending Application No. 10/699,509. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method and system for screening lubricating oil composition samples under program control by providing a plurality of different lubricating oil composition samples, each sample containing a major amount of a base oil and a minor amount of a lubricating oil additive, measuring stability

properties of the samples and outputting the results. It would have been obvious to one of ordinary skill in the art to either measure the storage stability or the wear stability of the composition samples in the screening method since both equivalently can indicate the usefulness and performance characteristics of the samples for their intended use as lubricants.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-6, 10 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al (US 2004/0123650) in view of O'Rear (US 2003/0100453) or Gatto (US 2003/0171226).

Kolosov et al teach of a high throughput testing method and apparatus for the screening of a library of material samples. The method and apparatus involve combinatorial chemistry that refers to the synthesis of a collection of diverse materials, and the screening of the materials for

desirable performance characteristics and properties. The combinatorial approach can effectively evaluate much larger numbers of diverse compounds in a much shorter period of time. The apparatus taught by Kolosov et al includes a plurality of samples supported in wells on a substrate. Kolosov et al teach that the invention can be used to screen libraries of any flowable material that may be a commercial product itself or may be a portion of a commercial product. Exemplary commercial products that can be tested with the apparatus taught by Kolosov et al include lubricants and oils. The invention can be used to analyze the resulting properties of a particular flowing material, and to analyze the relative or comparative effects that an additive has upon a particular flowable material. Additives in a flowable material to be tested include a detergent, a flow modifier, etc. See paragraph nos. 0042-0043 in Kolosov et al. The screening for the effects of different additives upon the characteristics of a flowing material is performed by measuring various properties of the material samples present in the wells on the substrate. Properties measured include the viscosity, the density, the thermal degradation, the aging characteristics, the chemical composition and the agglomeration or sedimentation of the material samples. See paragraph no. 0065 in Kolosov et al. Once the characterizing properties of the samples are determined, the results may be mathematically combined in various combinations to provide figures of merit for the properties of interest. See paragraph no. 0066 in Kolosov et al. The sample size of each sample in the wells on the substrate is typically no greater than about 20 ml, more preferably no greater than about 5 ml, and most preferred, no greater than about 0.5 ml. See paragraph no. 0054 in Kolosov et al. To form an array of samples on the substrate, Kolosov et al teach that the samples and additives are dispensed into the wells with any suitable dispensing apparatus (i.e. an automated micropipette or capillary dispenser). The

dispensing apparatus may have a heated tip, thus providing heating of the samples. Each sample is dispensed to an individually addressable region in the substrate. See paragraph no. 0053 in Kolosov et al. The plurality of samples can vary in number depending upon the intended use of the method, and the plurality of samples can form a library. A library comprises an array of two or more different samples spatially separated on a common substrate. Candidate samples within a library may differ in a definable and predefined way, such as in chemical structure, processing, mixtures of interacting components, the relative amounts of the components, the presence of additives and other reactant materials, etc. The samples are spatially separated on the substrate such that an array of samples is separately addressable for characterization thereof. The two or more samples can reside in separate containers formed as wells in a surface of a substrate or can be simply dispensed onto a common planar substrate. See paragraph no. 0057 in Kolosov et al. The apparatus taught by Kolosov et al comprises a stimulus generator 12 that applies power to a probe 14 for applying a stimulus to one or more samples 16 in the array or library of samples. The apparatus also includes a sensor or transducer 20 for monitoring a response of one or more of the samples 16 to the stimulus. The transducer 20 and the stimulus generator 12 are both in communication with a computer sub-system 23 such as a microprocessor or other computer for manipulating data. The computer sub-system 23 may be employed to receive and store data such as responses of samples 16, material properties of samples, etc. Additionally, the computer sub-system may be employed to command other components of the system such as the stimulus generator and the dispensing means, as well as to correlate responses of samples 16 to their respective material properties. See paragraph nos. 0067-0068 in Kolosov et al. The probe 14 may be translated, rotated, reciprocated or oscillated within the samples so as to mix the samples

and subject them to different forces. See paragraph no. 0070 in Kolosov et al. For contacting the probe 14 and dispensing means with the samples 16, the samples may be moved relative to the probe 14, or alternatively, the probe 14 may be moved relative to the samples 16. Combinations of these motions may also occur serially or simultaneously. An automated system may be used to move the one or more probes and the dispensing means serially or simultaneously to the various samples of a library. A suitable automated system is a robotic system such as an XYZ robot arm that has a multiple axis range of motion such as in the orthogonal X, Y, and Z coordinate axes system. This automated system is part of or in communication with the computer sub-system 23. See paragraph nos. 0073-0074 in Kolosov et al. Kolosov et al also teach that a plurality of control samples having known material properties are also monitored in the libraries along with the samples so that the responses of the samples can be compared with the known material properties of the controls. The responses of the samples in the library can be related to the known material properties by a mathematical relationship. Kolosov et al fail to teach that the lubricants containing additives therein in the combinatorial array can be screened for oxidation stability by either determining the time required for a lubricant sample to consume a predetermined amount of oxygen or by measuring the amount of deposits formed by a lubricant sample exposed to oxidation reaction conditions.

O'Rear teaches that the oxidation stability of a lubricant oil sample can be determined by exposing the sample to an oxidative atmosphere, and determining the time required for the sample to adsorb one liter of oxygen. See paragraph nos. 0032-0033 in O'Rear.

Gatto teaches of a method for determining the oxidation stability of a lubricant oil composition by measuring the deposits formed by the sample under high-temperature thin-film oxidation conditions. See paragraph no. 0065 in Gatto.

Based upon the combination of Kolosov et al and either O'Rear or Gatto, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al for oxidation stability since Kolosov et al teach that the plurality of samples in the array are screened for various material characteristics, and both O'Rear and Gatto teach that it is common to screen lubricating oil compositions for their oxidation stability by either determining the time required for a lubricant sample to consume a predetermined amount of oxygen or by measuring the amount of deposits formed by a lubricant sample exposed to oxidation reaction conditions.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al in view of Perez et al. For a teaching of Kolosov et al, see previous paragraphs in this Office action. Kolosov et al fail to teach that the lubricants containing additives therein in the combinatorial array can be screened for oxidation stability by using differential scanning calorimetry.

Perez et al teach that differential scanning calorimetry methods can be used to determine the oxidation stability of liquid lubricant compositions containing antioxidant additives therein. See lines 1-12 in column 9 of Perez et al.

Based upon the combination of Kolosov et al and Perez et al, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al for oxidation

stability since Kolosov et al teach that the plurality of samples in the array are screened for various material characteristics, and Perez et al teach that it is common to screen lubricating oil compositions for their oxidation stability by using differential scanning calorimetry.

13. Claims 7-8 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al in view of O'Rear or Gatto as applied to claims 1-6, 10 and 15-19 above, and further in view of McFarland et al (US Patent no. 6,541,271, submitted in the Information Disclosure Statement filed April 19, 2004). For a teaching of Kolosov et al, O'Rear and Gatto, see previous paragraphs in this Office action. Kolosov et al fail to teach that the lubricants containing additives therein in the combinatorial array can be screened for oxidation stability by measuring the amount of deposits formed by a lubricant sample exposed to oxidation reaction conditions using Fourier-transform infrared spectroscopy.

McFarland et al teach of methods for screening diverse combinatorial arrays of materials by measuring the materials deposited on a transparent substrate using Fourier-transform infrared spectroscopy. This method is use to quantify the stability of the materials and characterize chemical reactions. See the abstract, lines 61-67 in column 15 and lines 1-9 in column 16 of McFarland et al.

Based on the combination of Kolosov et al, either O'Rear or Gatto and McFarland et al, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al for oxidation stability for the reasons given above, and to further use Fourier-transform infrared spectroscopy to analyze the oxidation stability of the lubricant samples in the array since

McFarland et al teach that Fourier-transform IR is an efficient and accurate means to quantify the stability of materials in a combinatorial array.

14. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al in view of O'Rear or Gatto as applied to claims 1-6, 10 and 15-19 above, and further in view of Smrcka et al (EP 1,233,361). For a teaching of Kolosov et al, O'Rear and Gatto, see previous paragraphs in this Office action. Kolosov et al fail to teach that the results of testing the plurality of lubricating oil compositions can be stored in a data carrier or transmitted to a remote location.

Smrcka et al teach of a system and method for managing information pertaining to new product development. The method comprises the steps of testing a new chemical product, and storing the results in a data carrier such as a computer readable medium. All the data obtained through testing of a chemical product is stored in a central database. Remote access to the database is available globally from any personal computer having suitable client software installed and suitable network connectivity. See paragraph nos. 0011 and 0038 in Smrcka et al.

Based upon the combination of Kolosov et al, O'Rear or Gatto and Smrcka et al, it would have been obvious to one of ordinary skill in the art to store the results of testing the plurality of lubricating oil compositions taught by Kolosov et al in a data carrier that is available from a remote access site since Smrcka et al teach that it is advantageous to store the results of testing for products being newly developed on a computer readable data carrier that is available from a remote access site in order to share and disseminate the information concerning the new product to anyone in the world researching that product.

15. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al in view of O'Rear or Gatto as applied to claims 1-6, 10 and 15-19 above, and further in view

of Garr et al. For a teaching of Kolosov et al, O'Rear and Gatto, see previous paragraphs in this Office action. Kolosov et al fail to teach that each of the individual test containers that hold the lubricant samples have a bar code attached thereto.

Garr et al teach that it is common in a combinatorial library of reaction products arranged in an array to have each individual reaction container identified by a unique code such as a bar code, which is optically readable. The code can also be stored in the memory of a digital signal processor on a database. See lines 3-10 in column 4 of Garr et al.

Based upon the combination of Kolosov et al, O'Rear or Gatto and Garr et al, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to label each of the individual test containers in the combinatorial array taught by Kolosov et al with a bar code since Garr et al teach that it is common in the combinatorial library art to uniquely label individual members of the library with a bar code so as to be able to identify and distinguish the samples and their unique characteristics from one another.

16. Applicant's arguments filed August 30, 2005 have been fully considered but they are not persuasive.

Applicants are notified that the references on the Information Disclosure Statement filed on August 19, 2005 have been crossed out since these same references were already considered and made of record on the PTO-892 form attached to the Office action mailed on May 26, 2005 or on the Information Disclosure Statement filed on April 19, 2004.

The previous provisional rejections of the claims under the judicially created doctrine of obviousness-type double patenting made in the Office action mailed on May 27, 2005 are

maintained since Applicants have not sufficiently amended the claims nor filed the appropriate terminal disclaimers in order to overcome these rejections.

Applicants argue the rejection of the claims under 35 USC 103 as being obvious over the references to Kolosov et al, O'Rear and Gatto by stating that nowhere does Kolosov et al disclose or suggest the high throughput method of lubricant screening as recited in the instant claims, and that nothing in Kolosov et al would lead one skilled in the art to modify the system and method for testing the genera of flowable material with any of the broad tests disclosed therein and arrive at the specifically recited high throughput method for screening lubricating oil additive compositions as recited in the instant claims. In response to this argument, it is noted that the reference to Kolosov et al teaches of the general analysis of a large number of diverse compounds and that the compounds analyzed can be lubricants having an additive therein. See paragraph nos. 0042-0043 in Kolosov et al. It is inherent that in a lubricant composition having an additive therein that the base lubricant oil is present in a major amount while the additive is present in a lesser minor amount. Different lubricant compositions having additives therein are contained within test receptacles in an array or combinatorial library. It is inherent that each of the test receptacles taught by Kolosov et al contains a different lubricant composition since Kolosov et al teach that the candidate samples in a combinatorial array or library differ from one another in a definable and predefined way, such as the amounts of components included within the composition, the types of additives included within the composition, etc. Kolosov et al also teach of measuring stability parameters of the different lubricant compositions such as thermal degradation parameters, aging characteristics, and chemical composition. Although a large number of different types of flowable samples are taught by Kolosov et al as being analyzed in a

high throughput manner in a combinatorial library by measuring many different parameters, the fact remains that the disclosure of Kolosov et al does teach of the analysis of lubricant compositions having additives therein in a high throughput manner by placing many different types of the lubricant compositions in a plurality of receptacles, automatically moving the receptacles to locations for measurement of parameters and measuring many different parameters of the samples including those associated with the long-term stability of the compositions. Although Kolosov et al do not specifically teach of measuring oxidation stability parameters of the lubricant compositions, the secondary references to O'Rear and Gatto teach that it is common to measure the long-term stability of a lubricant oil composition having an additive therein by determining the oxidation stability of the composition.

Applicants argue that the references to O'Rear and Gatto fail to cure the deficiencies of Kolosov et al since O'Rear and Gatto do not teach of a high throughput method for screening lubricating oil additive compositions, but rather, disclose blends of synthetic and non-synthetic lube base oils or disclose organomolybdenum compositions. In response to this argument, it is noted that the primary reference to Kolosov et al teaches of a high throughout screening method and apparatus for screening a plurality of lubricant compositions, as noted above. The reference to O'Rear was used as a secondary teaching of the obviousness of measuring the stability of lubricant compositions containing additives therein by determining the oxidation stability of the composition with a measurement of the time required for the composition to adsorb one liter of oxygen. See paragraph nos. 0032-0033 in O'Rear. The reference to Gatto was used as a secondary teaching of the obviousness of measuring the stability of lubricant compositions containing additives therein by determining the oxidation stability of the composition with a

measurement of the deposits formed by the composition under high-temperature thin-film oxidation conditions. See paragraph no. 0065 in Gatto. Based upon the combination of Kolosov et al and either O'Rear or Gatto, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al for oxidation stability since Kolosov et al teach that the plurality of samples in the array are screened for various stability characteristics like thermal degradation, chemical composition, etc., and both O'Rear and Gatto teach that it is common to screen lubricating oil compositions for their oxidation stability by either determining the time required for a lubricant sample to consume a predetermined amount of oxygen or by measuring the amount of deposits formed by a lubricant sample exposed to oxidation reaction conditions.

Applicants argue that the reference to Perez does not cure the deficiencies of Kolosov et al since Perez does not teach of a high throughput method for screening lubricating oil additive compositions, but rather, discloses stable high temperature liquid lubricant blends and antioxidant additives. In response to this argument, it is noted that the primary reference to Kolosov et al teaches of a high throughout screening method and apparatus for screening a plurality of lubricant compositions, as noted above. The reference to Perez was used as a secondary teaching of the obviousness of measuring the stability of lubricant compositions containing additives therein by determining the oxidation stability of the composition with differential scanning calorimetry methods. Based upon the combination of Kolosov et al and Perez et al, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al for oxidation stability since Kolosov et al teach that the plurality of samples in the

array are screened for various stability characteristics like thermal degradation, chemical composition, etc., and Perez et al teach that it is common to screen lubricating oil compositions for their oxidation stability by using differential scanning calorimetry.

Applicants argue that the reference to McFarland et al does not cure the deficiencies of Kolosov et al since Mcfarland et al do not teach of a high throughput method for screening lubricating oil additive compositions, but rather, disclose a method and apparatus for characterizing liquids. In response to this argument, it is noted that the primary reference to Kolosov et al teaches of a high throughout screening method and apparatus for screening a plurality of lubricant compositions, as noted above. The reference to McFarland et al was used as a secondary teaching of the obviousness of measuring the stability of compositions by determining the materials deposited on a transparent substrate using Fourier-transform infrared spectroscopy. Based on the combination of Kolosov et al, either O'Rear or Gatto and McFarland et al, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to screen the lubricant/additive compositions in the combinatorial array taught by Kolosov et al for oxidation stability for the reasons given above, and to further use Fourier-transform infrared spectroscopy to analyze the oxidation stability of the lubricant samples in the array since McFarland et al teach that Fourier-transform IR is an efficient and accurate means to quantify the stability of materials in a combinatorial array.

Applicants fail to argue the rejections of the claims under 35 USC 103 based upon Kolosov et al, O'Rear or Gatto and the additional references to Smrcka and Garr et al other than to state that these additional references do not cure the deficiencies as noted above with regards to Kolosov et al, O'Rear and Gatto. Since Applicants' arguments with regards to Kolosov et al,

O'Rear and Gatto have been addressed above, no further comment on these references or the secondary references to Smrcka and Garr will be provided.

For all of the above reasons, Applicants' arguments are not found persuasive.

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen M. Wallenhorst whose telephone number is 571-272-1266. The examiner can normally be reached on Monday-Wednesday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maureen M. Wallenhorst
Primary Examiner
Art Unit 1743

mmw

November 2, 2005

Maureen M. Wallenhorst
MAUREEN M. WALLENHORST
PRIMARY EXAMINER
GROUP [redacted] 1700